Music meets Medicine: Looking into the Mind, Body and Soul for the Wellness that Music Brings

INTERDISCIPLINARY SOCIETY FOR QUANTITATIVE RESEARCH IN MUSIC AND MEDICINE



SORA

Virtual Conference

"Start with Dr. Tomatis's body of work, follow it through to the present day, add *Healing at the Speed of Sound* and, then attend a few Interdisciplinary Society for Quantitative Research in Music and Medicine (ISQRMM) conferences." (Meadowbrook Educational Services, 2016).



Executive Board of Directors & Conference Planning Committee



Professor David O. Akombo, PhD The University of the West Indies BARBADOS, W.I.



Dr. Kent Nelson, DMA Independent Scholar/Researcher Salt Lake City, UT, USA



Adina Dabija, LAc, MSTOM, Dipl OM New York City, USA



Eluv Elise Zotos www.eluvm Tampa, FL, USA

Past Board Members

- Dr. Joseph Ruszkowski, Independent Scholar, Honolulu, Hawaii, USA
- Estate of Dr. Jorje Camara, MD Professor of Ophthalmology, University of Hawaii, Honolulu, HI, USA Estate of Dr. Arthur Harvey, DMA, Professor Emeritus, University of Hawaii, Honolulu, USA
- Eric Miller, PhD, Montclair University, Department of Music Therapy, Ott Lab Coordinator, NJ, USA Lana Ryder, LMT. SoundwiseHealth.com
- Raymond Hong, LAC, MSAOM, LMT
- Lynn Miller MA, MT, Expressive Therapy Concepts
- Laura Dunbar, PhD, The University of Wisconsin-Eau Claire, WI, USA
- Roy Kennedy, PhD, The University of Georgia, Athens, USA

Acknowledgments

*Katrynna Jackowicz, Web Master

*JoEllen Schilke, Associate Web Master

*Our anonymous donors

Table of Contents

D - ---

	Page
President's Message	2
Keynote Speaker	3
Conference Schedule	4
Abstracts	5
About the Presenters	11
Musicians	15
ISQRMM Journals	16

Message from the President

"Music can lift us out of depression or move us to tears - it is a remedy, a tonic, orange juice for the ear. But for many of my neurological patients, music is even more - it can provide access, even when no medication can, to movement, to speech, to life. For them, music is not a luxury, but a necessity." (Oliver Sacks, 1933-2015)

Dear Conference Participants:

On behalf of the Interdisciplinary Society for Quantitative Research in Music and Medicine (ISQRMM), I welcome all of you to the 6th Biennial Conference of the ISQRMM 2021. The quantifiable study of the effects of music on the human body, mind, soul, and spirit is a discipline that has spurred an interest among scholars from both the humanities and biomedical disciplines since the 18th century. Researchers in the 21st century have continued to embrace these quantifiable studies with scholarly and academic vigor. The aim of the conference is to explore the unanswered questions about music as medicine.

Our conference participants have customarily enjoyed both amiable and amicable professional relationships including but not limited to cultural collegiality, professional interaction through discourses, and collaborative inquiries on scientific research in music and health, all with one common objective — to find answers to unanswered questions and asking new research questions on music and medicine. I hope this conference provides you with these opportunities as you enjoy our live musical performances.

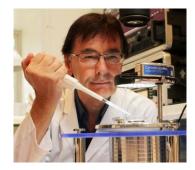
The history of ISQRMM spans from our inaugural conference in 2011 at Weber State University in Ogden, Utah, USA, which was rated among the best conferences by the Utah Business Bureau. Extra spaces Following that success, ISQRMM successfully held the 2nd biennial conference at The University of Georgia, Athens, GA (USA) in 2013, the 3rd biennial conference at Immaculata University, Immaculata, PA (USA) in 2015, and 4th biennial conference at Bridgeport University in Bridgeport, CT (USA) in 2017, and Molloy College, Rockville, New York (USA) for hosting the 5th ISQRMM biennial conference in 2019. The 2021 ISQRMM Conference was virtual and hosted by the University of Bridgeport, in Bridgeport, CT, USA. Once again, I welcome you to the 7th biennial ISQRMM conference. ISQRMM provides an unmatched platform to disseminate our data-driven research while spurring intellectual discourses among scholars and researchers internationally. ISQRMM has hosted scholars from around the world including but not limited to India, Brazil, United Kingdom, South Africa, Canada, China, Croatia, Austria, Europe, and The United States. We hope that the topics presented during our conferences will spur interest in research in order to support our mission. We look forward to seeing you at this conference and also in the future. Musically yours,

DriAkomho

Professor David O. Akombo, B.Ed., MA, MMus, PhD Dean, Faculty of Culture, Creative and Performing Arts The University of the West Indies, Barbados, WEST INDIES

President & Co-Founder, ISQRMM

How music regenerates old red and white blood cells, how pain can be mediated sonically, and how the sounds emitted by cancer cells could become a key tool for oncologists of the future



John Stuart Reid

Acoustic-physics scientist, John Stuart Reid, is a man on a mission to educate and inspire the world in the field of cymatics, the study of visible sound. His CymaScope invention has changed our perception of sound forever: seeing sound allows us to understand this omnipresent aspect of our world and universe fuller and deeper. His cymatics research is helping to elevate this important new field in the scientific arena, and he speaks at scientific conferences in Europe and USA. In the medical field his study of the effects of music on human blood, using the CymaScope instrument to differentiate between the sounds emitted by cancer cells and healthy cells was published in the Water Journal, and has far reaching health implications. In 2021 he was invited to write a chapter on Sound Therapy and Music Medicine for a new medical text book, published in 2022, in English, Russian and Slovak. Also, in 2022 he hosted a highly successful course with The Shift Network, teaching Cymatics, Sonic Science and Music Medicine and in late 2022 and early 2023 he hosted a successful advanced course with the Shift Network, based on Frequency Medicine and Cymatic Science. His study on how dolphins see with sound and communicate sono-pictorially, published in the Journal of Marine Science, carries the potential for interspecies communication, a future in which we may be able to hold a conversation with a dolphin. His two recent studies are focused on the effects of music on the longevity of red blood cells, with a preliminary report published by Experiment.com, and on differentiating between the sounds emitted by healthy cells and cancer cells, a study published in the Water Journal. John Stuart Reid's web sites are rich resources of knowledge on Cymatics and related fields: cymascope.com soundmadevisible.com

8:00 am EST	Music, Welcome, & Opening Rem	arks – David Akombo PhD	
8:30 am EST	Dr Amanda E. Krause	How Music Listening Can Support Perinatal Maternal Well-Being	
0.00 ani 101	James Cook University,	110w 111wite Essenting Can Support I critician Interesting	
	Queensland, Australia		
0.00 EST		Colf and Communed Healther by IZ colicity Chalmer Terring Counds W/Lile	
9:00 am EST	Rona Geffen Independent Scholar, Greece	Self and Communal Healing by Vocalizing Chakra Toning Sounds While Dancing in Raves and Parties	
9:30 am EST			
9:45 am EST	Marianne Gubri, MA	Human as a Multidimensional Harp: A Convergence between Therapeutic	
9.45 ann 1.51	Bologna, Italy	Music and Vibroacoustic Harp Therapy	
10:15 am EST	Dr. Kirsteen McCue	Neuroscience of Sound and Music: Spheres of Singing at the University of	
10.15 all EST	University of Glasgow		
	Glasgow, United Kingdom	Glasgow	
10.45 ···· ECT		vilaasha ay d Dawida V	
10:45 am EST	Coffee Break # 2: Music with Morikeyba and Partick K.		
11:00 am EST		Keynote Presentation	
	Discover	ring the Power of Sound on the Cellular Level	
Dr. John Stuart Reid			
Acoustics Engineer and Scientist, United Kingdom			
12:00 pm EST		1 Break	
12:30pm EST	Dr Sophie Boyd	Neuroscience of Sound and Music for Health and Wellbeing: Scotland's	
	Royal Conservatoire of Scotland	Singing for Health Network	
	Glasgow, United Kingdom		
	Dr Brianna Robertson-Kirkland		
	Royal Conservatoire of Scotland		
	Glasgow, United Kingdom		
1:00 pm EST	Ana Paul	Music and Academic Performance: How Binary Beats Can Reduce Stress	
	University at Buffalo, NY, USA	and Increase Focus	
1:30 pm EST	Iasos	The Mechanics of HOW Sound Can Induce Healing	
	Independent Researcher		
	Hawaii, USA	Including Original Music Presentation	
2:30 am EST	Adina Dabija	The Role of the Diaphragm in Reaching "Flow State"	
	LAc, MSTOM, Dipl. OM		
	New York, NY, USA		
3:00 pm EST	Coffee Break # 3: "Maria" and "I	Can Cook Too" by The Center City Brass Quintet	
3:15 pm EST	Lindy Romez (Jaya Devi)	Music and Medicine: Utilizing Music, Sound, and Frequencies to Easily	
	Calm One, Inc	Bring Balance, Harmony, and a Positive Change	
	St. Petersburg, FL, USA		
3:45 pm EST	Tony Crisos	The Orphic Path to Divine Union: "Theon Therapeian" and Ritual	
1	MM, Independent Scholar,	Music in Contemporary Greek Mysteries	
	New York, NY, USA	Including Original Music Presentation	
4:30 pm EST	Brian Manternach, DA	Confidence Alone: Survey of University Acting Majors Regarding the	
1.50 pm 1.01	University of Utah, Utah	Effects of Singing Training on Confidence and Skills	
	USA	June Jourgas - mangan San Sanjanan and Santa	
	Jeremy Manternach, PhD		
	University of Iowa, Iowa		
	USA		
5:00 pm EST		Using African Dyumming as a Halistia Attmaash to Daduning Sturan	
5:00 pm EST	David Akombo, PhD	Using African Drumming as a Holistic Approach to Reducing Stress	
	University of West Indies	and Improving Health: A Literature Review	
	Barbados, West Indies		
5:30 pm EST	Closing Remarks: ISQRMM Boar	d Members	

ABSTRACTS

Saturday June 3, 2023

How music regenerates old red and white blood cells, how pain can be mediated sonically, and how the sounds emitted by cancer cells could become a key tool for oncologists of the future

John Stuart Reid

Abstract

In his keynote presentation, Dr. Reid will address the intriguing topic of red and white blood cell regeneration by music, and the important subject of pain analgesia by sound and music. His presentation will also focus on mechanisms by which by music innervates the pleasure centers of the brain, leading to enhancement of the immune system, and how vagus nerve stimulation, achieved sonically via the tragus of the ears, reduces chronic inflammation, slows the rate at which we age.

Music and Medicine: Utilizing music, sound, and frequencies to easily bring balance, harmony and a positive change

Lindy Romez (Jaya Devi)

Abstract

The purpose of this to continue to bring awareness into the community through the use of music and sound. Everything in the whole universe is in a state of continual vibration and those vibrations make a sound and those sounds have different frequencies. Every object in the universe has its own unique resonant frequency and every organism has its own vibratory rate. Since we are also part of the universe, we are also made up of sound, vibration, and frequencies. Every part of the human body and outer (etheric) energy layers that surround the body is a field of vibration which, when in a state of health, resonates in harmony (resonance) and when sick (dis-eased) vibrates in various disturbed patterns (dissonance). Every organ, bone, tissue, gland, etc. has its own healthy resonant frequency. Disease, which we will refer to as dis-ease, is the dis-harmony in the vibrational pattern of one or more of these parts or systems of the body. A big component of disharmonies in the mind and the physical body is what most medical professions cannot detect or understand until they are having to treat symptoms the arise from the breakdown of this system - the nervous system. The nervous system is essential to our well-being, just like air and water. It's an invisible superhighway that links all functions in our body and Its functioning is fundamental to how we feel, how we maintain our energy levels and how we show up and perform in life. The problem so many of us are facing today is that our current lifestyle presents continuous and unrelenting stress demands, which our nervous system was not designed to handle, so the body gets stuck in the "on" fight or flight position. We can translate to the "Beta" brain wave state, and most do not know how to release the tension and come down from this continual adrenaline surge. In our evolution, threatening situations were short lived. Our fight or flight mechanism kicked in if we were being chased by a lion, and afterwards we went back to a state of peace, so we could rest and regenerate. In today's world, we have continual deadlines to meet, bills to pay, traffic stress, competition, corporate ladders to climb etc. So many of us develop the habit of staying in the switched-on stress response state continually. After some years of this behavior, our adrenals wear out. We are then in a state of adrenal fatigue or burn out, in which the health of our whole body is affected. Chronic stress and burn out has been linked to:

- Mental imbalances
- Digestive issues
- Skin problems
- High blood pressure
- Sleep disorders
- Auto-immune diseases (Smerling, 2018) including MS and Parkinson's (Chan et al 2017).

However, it has been shown that if a stress condition is treated, it reduces the likelihood that a more serious auto-immune disease will develop (Wurtman, 2018).

The encouraging reality is that we all have the capacity to heal ourselves through sound, frequencies and positive practices and here's why.

A healthy frequency is referred to as a sound signature and these "signatures" combine with one another, as well as with mental and emotional tones and overtones, to make up a person's "pitch." It is possible to bring the "pitch" into states of harmony with the use of externally created sound, such as the pure tones of Tibetan and quartz crystal bowls, to rebalance a dis-eased area or system of the body. This is accomplished by the penetration of sound into the very cells of the body, causing them to harmonically reorganize themselves through a phenomenon called *entrainment*. As sound waves "touch" peripheral cells, these cells in turn touch adjoining cells creating *harmonic resonance* within a particular area or system of the body. This is made possible by the high-water content of the body's tissues as well as the crystalline structure of human bones, blood, DNA, and the liquid crystal-colloidal structure of the human brain. Even on a molecular level, our cells contain silica (quartz) which enables the body to maintain its electrical (electro-magnetic) balance.

Since sound affects us at both the conscious and unconscious levels it also has the ability to counterbalance the physical and emotional states of the body and the mind that taps into and adjusts brainwave states. By using sound, the internal and external can be brought back into states of harmony and flexibility easily.

It is important to note that research can continue to prove the effectiveness of using sound to heal. It is also important that we reintroduce the ancient practice of sound healing back into our modern society and that we introduce positive practices that support the use of sound as medicine through a daily practice of mindfulness, meditation, breathwork and moving the physical body.

How music listening can support perinatal maternal well-being

Dr Amanda E. Krause James Cook University, Queensland, Australia

Abstract

Introduction: Low maternal parenting self-efficacy (i.e., a mother's low confidence in her ability to care for, and support the health of, her baby) is a significant predictor of postnatal mental illness, poor family functioning, and numerous negative child health, development, and behaviour outcomes. A digital WebApp under development aims to provide a digital resource centre (including activities and materials for perinatal women and paired supporters) to build maternal parenting self-efficacy. To assist in creating a well-rounded suite of resources including those related to music (e.g., guided music listening tracks for relaxation), a scoping review will be conducted to consolidate evidence-based knowledge on the role of music listening for maternal wellbeing during the pre-natal and delivery periods. Materials & Methods: While previous research has focused on the infant, and neonatal intensive care unit experiences in particular, the focus of this scoping review is on mothers' experiences during pregnancy, guided by a research guestion that asks, What does the published research tell us about the influence of music on mothers' well-being during the perinatal period? Following PRISMA guidelines, a scoping review will be conducted whereby the eligibility criteria includes: works published in the last 20 years in English about females in the prenatal-to-birth period and music listening. A database search will be done using designated search terms (music+listen* and perinatal, peri-natal, peri natal, pre-natal, pre-natal, pregnant, labor, birth). Results and Discussion: Preliminary search results suggest that music listening is effective in reducing mothers' stress, anxiety, and depression levels, improving sleep quality, and is associated with an increase in maternal-infant bonding and maternal self-efficacy. The results have implications for the development of music resources and activities tailored to support perinatal women's well-being.

The role of the diaphragm in reaching "flow state"

Adina Dabija, LAc, MSTOM, Dipl OM, USA

Abstract

"Flow state", a term coined by the Hungarian-American psychologist Mihaly Csikszentmihaly, is a mental state that enables one's focus on a single activity. It is also called in a hyperfocused state, or being effortlessly "in the zone". This paper aims to explore the connection between the use of the diaphragm through breathing and singing and the access to a heightened sense of awareness and connectivity.

The Mechanics of HOW sound can induce Healing

lasos Independent Researcher Hawaii, USA

Abstract

Background: This presentation will address music and healing. Since I have been focusing on creating music for over 50 years, I would like to share what I have learned about the MECHANICS of exactly HOW sound & music can induce healing. I'll be discussing in detail the 4 primary factors: (1) Physical Resonance; (2) Emotional Resonance; (3) Intent; and (4) Belief.

How Binaural Beats Can Reduce Stress and Increase Focus

Ana Paul

University at Buffalo, New York

Abstract

Introduction: There are several studies showing that binaural beats can reduce anxiety, stress and sometimes help people sleep. I would like to see if these sounds can also help college students focus. To investigate this phenomenon, this pilot study will survey college students aged 18 and older. It will consist of three parts; Research, surveying and testing a hypothesis out in practice. Methodology: First I will randomly select a group of students and have them complete a task while not listening to any music. Afterwards I will divide the group into two randomly selected groups and have both of them complete the same task. Group A will complete the task while listening to binaural beats and Group B will complete the task while listening to their personal music playlist. This research will utilize opportunity sampling methods in a between-subjects research paradigm. Data will also consist of analysis of data collected by scientists on the topic of effects of binaural beats on anxiety, stress, and sleep disorders. Participants will be asked to complete a survey before and after the experiment. In the first survey they will be asked about their study habits, if they prefer studying in silence or with music, and whether or not they believe music impacts their focus. The second survey is to be completed after the experiment. Students will be asked if they noticed a change in focus, after listening to binaural beats or their own personal music playlist. For the third portion of my research. Results: I will analyze and compare their performance and the amount of time that it took them to complete the task each time. Afterwards I will see which group had a higher rate of improvement while completing the task the second time. If the two groups have similar results, the Hypothesis, being that binaural beats improve focus, will be rejected. To conclude my study, I will summarize my personal findings in a paper and compare them to the statistics gathered from other peer-reviewed articles.

A Convergence between Therapeutic Music, Vibroacoustic Harp Therapy and Music and Imagery

Marianne Gubri Bologna, Italy

Abstract

Each human being is a complex structure of different layers; music and sound, with their proven impact on response mechanisms of the brain and the body, may contribute to harmonize different aspects of human existence such as physical, emotional, cognitive, and spiritual spheres. Harp therapy provides a sonic cocoon; its positive effects on heart and breath variability have been widely described in scientific literature. Vibroacoustic Harp Therapy provides a deeper frequency massage in all the body, which may reduce pain, anxiety and stress. Music and Imagery techniques have shown how music can have a positive impact on inner imagery. Based on a private VAHT study, this presentation will propose a convergence of these different approaches. It will be possible to draw an indicative map of resonant frequencies in the body and to investigate how to create balance from left to right and harmony with overtones series, finding specific recurrent frequencies or frequencies experienced outside the body. Some notes may also touch specific blocks, which resonance may induce a release of emotions, potentially balanced with modal and rhythmic changes. A deeper relaxation state may be induced through visualization of specific images, while positive affirmations can reframe the inner world.

The Orphic Path to Divine Union: "Theon Therapeian" and Ritual Music in Contemporary Greek Mysteries

Antonios Chrysovergis

Abstract

This paper explores the value of "Theon Therapeian," an ancient Greek therapy idea that emphasizes "Service to the Gods" and "Divine Worship" using ritual music. The study focuses on the Orphic tradition and religion in the context of contemporary Greek mysteries. It aims to reveal the transformative power of Divine Worship, the use of ancient symbols, and musical esoteric correspondences to achieve unity between the human soul, nature, and the divine. The research includes a historical overview of the Orphic tradition and its beliefs, along with examples of contemporary Orphic rituals, concentration exercises, and musical examples. Ultimately, this study aims to revive and elevate ancient practices and inspire interest in the transformative and therapeutic power of ancient Greek mysteries.

Self and Communal Healing by Vocalizing Chakra Toning Sounds While Dancing in Raves and Parties

Rona Geffen

Abstract

While dancing in raves and parties people tend to spontaneously vocalize vowels which accurately resemble what is commonly known as Chakra Toning Sounds. This sonic observation raises the hypothesis that people instinctively and intuitively heal themselves by balancing and activating their own chakras with their voice. To test and verify this hypothesis a survey was conducted in which 96 participants were asked to share their experience about the voices they produce and hear in raves and parties while dancing. The majority of participants reported to use their voice and hear others use their voice with Chakra Toning Sounds. An interesting observation suggests that a communal effect is created by this action, in which self healing informs and encourages communal (group) healing, possibly underlying collaborative and collective healing.

Keywords: Vibrational Medicine, Chakra Toning Sounds, Dance, Rave, Self Healing, Group Healing, Sound Healing,

Using African drumming as a holistic approach to reducing stress and improving health: A Literature Review

David O. Akombo The University of the West Indies, Barbados

Abstract

Aims: There is dearth of data on the potential health benefits of particularly djembe drumming. This presentation will examine a literature review on the few studies that have specifically examined diembe drumming that show that the drumming exercise at a low-to-moderate intensity exercise, can simultaneously reduce stress and anxiety levels and benefit cardiovascular health. Methods: The literature reviewed is based on study populations, middle-aged experienced drummers and younger novice groups who participated in djembe drumming sessions. Baseline measurements such as those of blood pressure, blood lactate and stress and anxiety levels were taken before and after sessions. Also, heart rate was monitored at 5-s intervals throughout each session. **Results:** The literature review shows that participation in drumming significantly decreased the Stress Anxiety Index scores acutely, and some cased with a significance of (P < 0.01). In some studies, the SBP was significantly decreased in the older population post drumming (141 ± 24 vs. 153 ± 26 mmHg; P < 0.01). Blood lactate levels remained below 4 mmol/l in all individuals and together with heart rate suggest that drumming may be categorized as low-to-moderate intensity exercise. Conclusion: Djembe drumming may improve cardiovascular health, without the cardiovascular risks to unhealthy or older populations that are associated with higher intensity exercise, and at the same time may decrease stress and anxiety levels. Furthermore, participation in drumming did not result in acute hypotension in normotensive individuals.

Confidence Alone: Survey of University Acting Majors Regarding the Effects of Singing Training on Confidence and Skills

Brian Manternach, D.Mus. University of Utah Department of Theatre Utah Center for Vocology Jeremy N. Manternach, Ph.D. College of Education School of Music University of Iowa

Abstract

A three-semester singing course devised for university acting majors had a three-fold focus: (1) performing songs, (2) music theory, and (3) vocal pedagogy (physiology, technique, wellness). After the course had been taught for four years, 59 of the 72 students (81.9% response rate) who finished at least one semester completed a survey assessing which elements of the curriculum they felt were most useful while they were taking the course(s) compared to once they had completed the course(s). As was previously published, while taking the course(s), the highest number of participants (n = 26, 44.1%) reported believing that learning and performing songs was the most useful, followed by music theory (n = 23, 39.0%), and vocal pedagogy (n = 10, 17.0%). However, perceptions inverted after taking the courses, with vocal pedagogy rated most useful (n = 24, 40.7%), followed by music theory (n = 32.2%), and learning and performing songs (n = 16, 27.1%). This trend increased as students were further removed from the course.

Participants were also asked to report how the coursework affected their confidence and skills for singing. Of those who participated in auditions (n = 43, 72.9%) or stage productions (n = 29, 49.2%) that required singing, more than 90% reported the courses were extremely or somewhat helpful in building their *confidence* and more than 95% reported the courses were extremely or somewhat helpful in building their *skills*.

This presentation examines previously unreported data from the two open-response questions at the end of the survey: (1) Overall, what do you feel is valuable about the singing training you took as you were training to be an actor? (2) Do you have any other comments or reflections on the course that you would like to share? 47 of the 59 participants mentioned improvements in confidence and/or skills in their open-response answers (79.7%). Of those respondents, 68.1% specifically mentioned improvements in confidence, or they used a phrase that is synonymous with confidence, such as, "[It] helped [make] singing in front of people less scary;" and "[T]he most valuable thing I learned is to trust my own voice." This is compared to 46.7% who

specifically mentioned improvements in skills. Additionally, 46.8% indicated improvements in confidence or a synonymous phrase *without* mentioning improvements in skills, while only 23.4% mentioned improvements in skills without mentioning confidence.

Since participants were asked directly about perceived improvements in confidence and skills earlier in the survey, it is unsurprising that they are mentioned prominently in the open-response answers. However, the fact that improved confidence received greater mention than improved skills may be an indication that the greatest benefit of the class was related to an increase in confidence.

The performances seemingly gave students opportunities for mastery experiences, which is a key component to Bandura's self-efficacy theory. There is also research indicating that domain-specific self-efficacy (e.g., in singing performance) is linked to general self-efficacy; and high general self-efficacy has been linked to overall psychological well-being.

Neuroscience of Sound and Music: Spheres of Singing at the University of Glasgow

Dr. Kirsteen McCue University of Glasgow

Abstract

Since the success of the 'Spheres of Singing Conference' held online in the summer of 2020 during the COVID lockdown, the University of Glasgow, via its ARTSLAB, has been supporting the development of a crossdisciplinary research initiative focussed on songs and singing. The aim of the network is to pull together exciting work by academics in the arts & humanities, social sciences, medicine, and life sciences, and to forge paths for new research and evaluation of the importance of songs and singing in Scotland and beyond. This brief presentation will describe our 'story so far', explaining the range of the work at Glasgow to date, and describing how we wish to develop this going forward.

Neuroscience of Sound and Music: Singing for Health and Wellbeing: Scotland's Singing for Health Network

Dr. Brianna Robertson-Kirkland The Royal Conservatoire of Scotland Glasgow, United Kingdom

Dr Sophie Boyd Research Assistant The Royal Conservatoire of Scotland Glasgow, United Kingdom

Abstract

Scotland's Singing for Health Network is designed to provide a space for singing practitioners, medical practitioners, and researchers working on singing and health, to come together to share knowledge, ideas, and practice and to open avenues for communication between individuals and organisations. The network aims to educate and inform those in the community, particularly teachers and health practitioners, about the current Singing for Health practice and how it can support those in the community who many benefit from regular singing, perhaps in the form of attending a Singing for Health group. In this brief presentation, we will outline the need for this kind of network and will discuss the project outputs and how these are being used to connect and inform healthcare workers, musicians, and anyone in the community, to learn more about the how singing can be used to support health and well-being.

Link to the network website: https://portal.rcs.ac.uk/scotland-singing-for-health-network/

About the Presenters



Lindy Romez is a professional musician, Reiki Master, Author, who is Certified in Sound Healing, Yoga and Meditation and is a veteran of the US Army. Lindy's passion for yoga and sound healing came after she experienced some trauma while in the service and a car accident in 2000 that exacerbated that trauma. Her journey into her own physical and mental recovery led her to study in India where she discovered the deep healing properties of yoga, sound, vibration and harmony. As an Army Veteran, Lindy has helped fellow veterans who struggle with post-traumatic stress and anxiety through the use of Tibetan Sound Bowls, Reiki, Yoga, and Meditation. In 2019, she founded Calm non-profit organization One. Inc.. а

(<u>www.calmone.org</u>) to continue her work supporting veterans with post-traumatic stress and anyone experiencing mental and physical dis-eases. Her research on sound frequencies, binaural beats, and isochronic tones, similar to what the Tibetan bowls produce, has shown to be effective in calming the nervous system. By synchronizing with these resonant signatures, the body and mind can align with the vibrations of planet, reconnecting those who feel disconnected. Today, Lindy is passionate about sharing the healing benefits that any yoga practice can offer and understands that on a deeper level, it is ultimately what we do for ourselves through self-care that heals, transforms and empowers. Lindy can be reached at <u>lindyromez@gmail.com</u>



lasos (pronounced ya' sos) is a music-creator, specializing in heavenly, celestial, interdimensional music. He is also one of the original founders of "New Age" music, releasing his first album in 1975. Since then, he has remained active in creating celestial music and healing sounds. lasos can be reached at <u>iasos@iasos.com</u>



Rona Geffen is a Sound Researcher, Sound Healer, Music Producer, Composer, Vocalist, Sound Engineer, and Music Entrepreneur. The Alchemy of diffusing genres and practices was always present in Geffen's work as she studied music production and established a career as a Hardcore Pop-Avantgarde musician and multi disciplinary artist. Geffen released 3 solo albums, the electronic opera STRIKE! And collaborated with artists such as Mad Professor, Ori Lichtick, Yasmeen Godder and many others. Composed for dance and theater plays in Germany and Israel, participated in art and mixed media events worldwide and toured with her solo act in Europe and USA. In 2015 Geffen started an independent sound research on the connection of geometry, mathematics and sound with healing which led her to work with high-end spatial sound technology 4DSOUND, the Spatial Sound Institute in Budapest, sound researchers,

mathematicians, medical practitioners, scientists and physicists. Geffen's research accumulated to her invention of Geometric Sound, a new property in the field of spatial sound, which showed promising indications in neurotrauma and stress rehabilitation. Today Geffen is the Lead Sound and Medicine researcher at The Works Research Institute focusing on Geometric Sound effect on human health. Geffen is a certified sound medicine practitioner and studied various methodologies and instruments in sound and vibrational medicine including multi instrumental & voice vibration medicine as integral medicine at the Sound Healing Academy (UK), vibrational acupuncture with planetary calibrated tuning forks according to Acutonics method (IL, UK), BioAcoustic technician at the Institute of BioAcoustic Biology and Sound Health (USA), and healing with singing bowls (IN/USA). Rona can be reached at booking@ronageffen.com



Antonios Chrysovergis (Tony Crisos) is a musician, writer, philosopher, and lecturer. He studied Music Performance with a special focus on Jazz at Berklee College of Music (BA) and received his Masters in Music Education from Boston University. He has studied ancient Greek Philosophy, as well as Western Esoteric traditions, and performs on both the guitar and the ancient Greek Lyre. Antonios, as a writer and philosopher, lectures on the Orphic tradition throughout the country and has published several articles on music and philosophy. Tony can be reached at tcrisos@me.com



Kirsteen McCue is Professor of Scottish Literature and Song Culture and was Co -Director of the <u>Centre for Robert Burns Studies</u> at the University of Glasgow (2011-22). She is now leading a new research initiative called <u>'Spheres of Singing'</u>, establishing a range of new singing-related projects with colleagues across multiple disciplines at the University. She has published widely on Romantic song culture, including 'The Culture of Song' in the *Oxford Companion to British Romanticism* (2018), essays on Lord Byron and John Clare, and on Robert Burns's songs and musical responses to Burns's work. She is editor of two editions of songs by James Hogg for Edinburgh University Press (2014) and her edition of *Robert*

Burns's Songs for George Thomson, vol 4. of the Oxford *Works of Robert Burns*, appeared in 2021. She is currently working on British National Song culture during the period 1750–1850, after having led the <u>Romantic</u> <u>National Song Network</u> funded by the Royal Society of Edinburgh 2017-2019. Kirsteen McCue can be reached at <u>Kirsteen.McCue@glasgow.ac.uk</u>



Brianna E. Robertson-Kirkland is a Lecturer in Historical Musicology at The Royal Conservatoire of Scotland and is particularly interested in the history of singing practice and education, historically informed performance, and singing for health. She is the PI for the Royal Society of Edinburgh-funded network, <u>Scotland's Singing for Health Network</u> (SSfHN) and has recently published her first monograph titled <u>Venanzio Rauzzini and the Birth of a</u> <u>New Style in English Singing Scandalous Lessons</u>. She is also the Music Research Associate for the AHRC-funded project <u>'The Edited Collection of Allan Ramsay'</u> at the University of Glasgow and, alongside Murray Pittock, is co-editor of Ramsay's *Tea-Table Miscellany*. Brianna can be reached at <u>Brianna.Robertson-Kirkland@glasgow.ac.uk</u>



Ana Paul is a Romanian-American 19-year old musician currently based in Long Island, New York. During her formative years she attended the German International School of New York in Westchester, where she learned German fluently and received her DSD-II certification, making her trilingual. She attended Fiorello H. LaGuardia High School as a vocal major and released her first album, *Lady Moon*, in 2020 at age 16. Ever since then she has been releasing music on streaming platforms each year, composing all of her own songs and lyrics, recording and producing several of them by herself. She also studied hypnosis and received her certification in 2021. She is currently studying Psychology on a pre-med track at the University at Buffalo. Ana can be

reached at anapaul3756@gmail.com



Adina Dabija, LAc, MSTOM, Dipl OM Adina Dabija is a New York State Licensed Acupuncturist, nationally certified in Oriental Medicine by the National Commission for Certification of Acupuncture and Oriental Medicine and nationally certified by the American Board of Anti-Aging Health (ABAAHP). She holds a Clinical Master Degree from Pacific College of Oriental Medicine and formal certifications in Medical Qi Gong from the Institute of Classical Asian Studies. With over fifteen years of clinical experience, Adina has been helping thousands of people to improve their health. Adina presented a pilot study with the title "Plato's Harmonious Man: a musical journey with-in using "charms", silence and remembrance of the cosmic harmony" at the ISQRMM 2019 Conference and "Music in Ancient China" at the 2021 conference. Adina can be reached at <u>adina@sol.center</u>



Marianne Gubri is French-Italian harpist, composer, therapeutic musician and researcher. She combines an original and unique musical journey with a quest for personal development. She has published more than **10 albums**, a **book** on historical music therapy *Una melodia per l'aere luminoso*. Director of the **Bologna Harp Festival**, she speaks at TEDx conferences, international courses, Conservatories and Universities. A graduate in the

United States in therapeutic music with IHTP, in VAHT Vibroacoustic Harp Therapy, she is the Director of International Harp Therapy Program for France and Italy and organises seminars on well-being through sound. She graduated in the Celtic harp in Brittany and in ancient harps at the Conservatoire of Tours, and she received a Master in Musicology at the University of Venice / Tours in 2002. She performs in numerous concerts and international tours in all Europe, Mexico, Brazil, USA, Dubai, China, India, Egypt with her own compositions. www.mariannegubri.com



Dr Amanda E. Krause is a Lecturer (Psychology) in the College of Healthcare Sciences at James Cook University (Queensland, Australia). As a music psychology scholar, she studies how we experience music in our everyday lives. Her research asks how our musical experiences influence our health and well-being. Dr Krause's research has made significant contributions to understanding how listening

technologies influence people and how musical engagement impacts well-being. Recent publications and further information can be found on her website at www.researchaboutlistening.com. Dr. Krause can be reached at <u>amanda.krause1@jcu.edu.au</u>



Brian Manternach, D.Mus., is Associate Professor at the University of Utah Department of Theatre and Research Associate for the Utah Center for Vocology, where he is on the faculty of the Summer Vocology Institute. He has given presentations for the Voice Foundation, PAVA, VASTA, NATS, International Physiology and Acoustics of Singing Conference, Fall Voice Conference, and TEDx Salt Lake City. An associate editor for the Journal of Singing, he is also a regular contributor to Classical Singer, which has published more than 100 of his essays, interviews, and reviews. Additionally, he has written articles for the *Journal of Voice, Voice and Speech Review, VOICEPrints, College Music Symposium, NATS Inter Nos*, and the *Music Theatre Educators' Alliance Journal*. He holds a Doctor of Music degree in voice performance from the Indiana

University Jacobs School of Music and has made solo appearances with the Milwaukee Symphony Orchestra, Cleveland Chamber Symphony, and Sinfonia Salt Lake, among others. Brian may be reached at brian.manternach@utah.edu



Jeremy N. Manternach, Ph.D., is Associate Professor and area head of music education at the University of Iowa, where he teaches undergraduate and graduate choral pedagogy, music education, and research courses. He also coordinates and conducts the UI Youth Chorale, a high school outreach choir. He previously held the same position at the University of Arizona. Dr. Manternach has conducted state, conference, region, and city honor choirs in Arizona, Colorado, Idaho, Iowa, and Kansas. Additionally, he has performed with such groups as the Minnesota Chorale, The Singers - Minnesota Choral Artists, Kantorei (MN), and the Vocal Artists of Iowa. Dr. Manternach's research interests include choral conducting gesture and singer efficiency, choral and vocal acoustics, and teacher voice use. He currently serves on the editorial board of the *Journal of Research in Music Education* and is a member of NAfME, ACDA, PAVA, and the VoiceCare Network. Jeremy can be reached at jeremy-manternach@uiowa.edu



Dr Sophie Boyd is an interdisciplinary researcher and practitioner specialising in the health and wellbeing impacts of group singing. She was awarded a PhD from the University of Glasgow in 2021 for her practice-led Human Geography thesis <u>'Singing bodies: cultural geographies of song and health in Glasgow</u>'. Dr Boyd is the Research Assistant for <u>Scotland's Singing for Health Network</u> at the Royal Conservatoire of Scotland, where she has been developing accessible knowledge exchange to highlight the role of singing for health. Sophie can be reached at <u>sophieboyd94@gmail.com</u>



David O. Akombo, PhD is Professor and Dean of the Faculty of Culture, Creative and Performing Arts at the University of the West Indies, Barbados. Professor Akombo previously served as Diversity Fellow at Weber State University in Utah and Faculty Fellow at Jackson State University in Jackson, MS. Intrigued by the peculiarities of music and its interdisciplinary confluence with medical and psychological practices, Professor Akombo has studied and researched the effects of music on children and young adults both in schools and in hospitals. As scholar and performer, Professor Akombo balances his research interests amicably as a music educator, ethnomusicologist, composer and singer/drummer, having worked in Africa, The United States, and Southeast Asia where he studied with Balinese artists. His books, *Music and Healing Across Cultures* (Ames, Iowa: Culicidae Press, 2006) and *Music and Medicine: Connections Found* (Seaburn 2009) unfold the mechanics of the relationships between music, culture, physiological and spiritual states in people from the anthropological and epistemological inquiry regarding music and healing. Professor Akombo has worked jointly with the University of

Florida's Center for Arts in Healthcare Research and Education (CAHRE) with which he collaborated to establish the Arts in Medicine (AIM) program in Nairobi, Kenya. Located at Mater Hospital and funded by the Legislature and State of Florida Center for Cultural Affairs in Tallahassee, USA, this is the first known Arts in Medicine program in Africa. Professor Akombo continues to be active in music education research, and interdisciplinary scholarship having conducted clinics in several countries. He is a 2017 recipient of the NSF Research Training Scholarship. He is the President and Co-Founder of ISQRMM. Professor Akombo can be reached at <u>dakombo@isqrmm.com</u>



Healing Music Artist, Channel/Medium & Radio Personality Eluv (Elise Zotos), was born and educated in Melbourne, Australia. Eluv is the host of <u>"Ultrasounds" radio</u> <u>show on WMNF, 88.5 FM Tampa</u>. Thursday's 10pm-Midnight. She creates beautiful inspirational music, guided meditations, and visualizations for relaxation and healing. Her music covers many genres and is a unique blend of musical elements from around the world and spoken meditations, giving the listener a truly unique and relaxing recorded experience. Her recordings are featured on the Monroe Institute's Hemi-Sync label, with binaural sound healing technology added to balance the left and right hemispheres of the brain. Her singing style is a unique

Institute's Hemi-Sync label, with binaural sound healing technology added to balance the left and right hemispheres of the brain. Her singing style is a unique immersion into grace with her angelic vocals and sacred songs. Eluv combines her vocals with a tapestry of pure tones of the Crystal Singing Bowls, lush harp strings, and other beautiful sounds. Known for her openhearted intuitive approach to healing, Eluv's music awakens joy, heart opening, well-being and deep relaxation. She is a featured guest speaker on sound healing and performs live "Sound Healing" concerts globally. Her practice features multiple modalities; Sound Healing with Crystal Singing Bowls, and Angel Harps, Live Healing Music Performances, Composing Music & Guided Meditations, Voice Overs, Mantra, Kirtan, Mandala Art, Essential Oils, Flower Essences. She is a Shamanic practitioner and an Advanced Ancestral Healing practitioner, offering private sessions for people and animals.



The Center City Brass Quintet is an all-star ensemble of renowned soloists and members of America's finest orchestras, who convene throughout each season to produce chamber music of the highest caliber. The quintet, originally formed at Philadelphia's Curtis Institute of Music, now comprises members of the Cleveland Orchestra, Pittsburgh Symphony and Seattle Symphony, and the Buffalo Philharmonic, and its players have performed as soloists with such notable ensembles as the New York Philharmonic and the Boston Pops. Called "one of the strongest of today's brass quintets", and "a virtuoso outfit which plays like no other" by American Record Guide, and "an exquisitely blended ensemble" by Gramophone, the <u>Center City Brass Quintet</u> is known worldwide for its superlative renditions of the standard

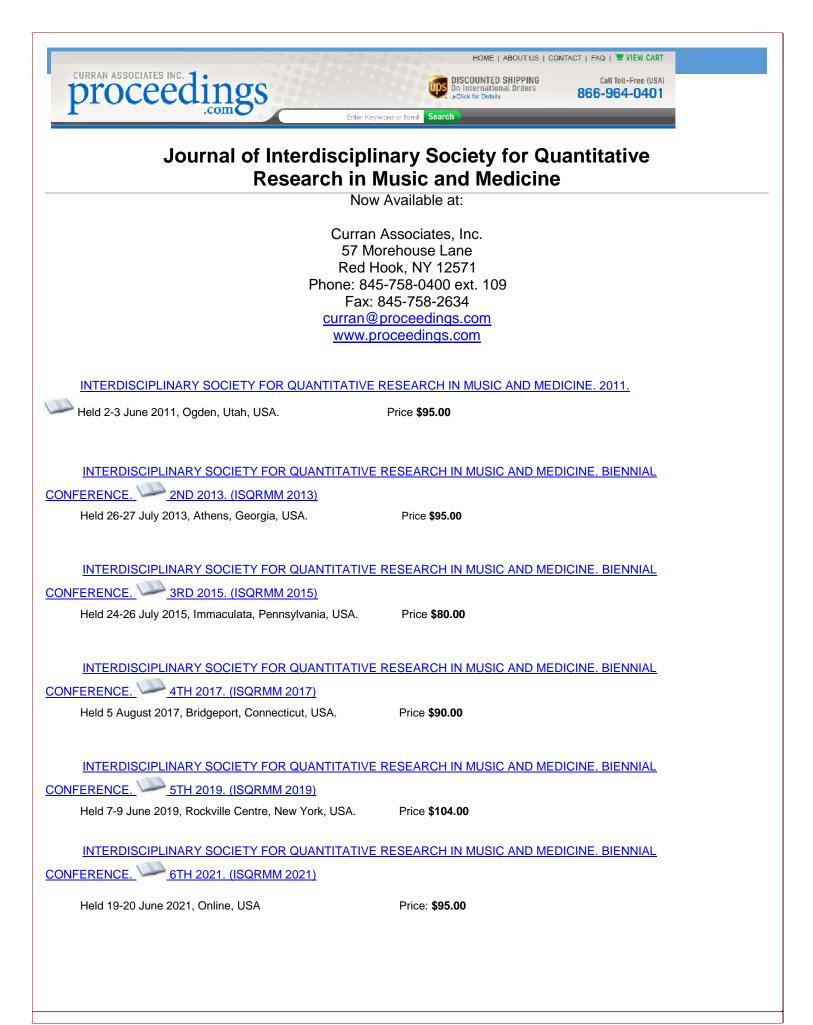
brass quintet repertoire, as well as for original arrangements which span from Bach to Bernstein. Working around the many commitments of each of its members, the Quintet presents a limited number of recitals each year.

Morikeba Kouyate is a *Jali*, a carrier of the oral traditions of the Mandinka people. Born in Bounkiling, Senegal, he inherited his sacred profession from over 700 years of both maternal and paternal family lineages. He has been travelling and professionally performing songs, stories, and history since he was 14 years old. In the USA, Morikeba has played at hundreds of festivals and cultural events and conducted many workshops on the history of the *Jali* and the music of the kora. He has recorded 3 albums of traditional kora music.

Patrick Klemawesch is an allergist and immunologist from Florida, USA. A lifelong musician and recording artist with multiple groups, he has been studying the kora with Morikeba for 5 years.

About the Kora

The kora is a 21 string bridge harp originating in the Manding empire of west Africa around the 13th century. It is made from a large calabash gourd, a calfskin, four sticks, and a wooden bridge, with two separate rows of skin or monofilament strings. Along with the balafon and *ngoni*, it is one of the instruments of the clans of *Jalis* ("Griots" in French). *Jalis* are musicians, advisors, oral historians, and essential performers at ceremonies including naming of children, marriages, and funerals. The kora is traditionally used by *Jalis* to perform songs of praise and to recount clan histories, but also as a vehicle for more subtle emotional influence on the meditations and decisions of rulers and patrons. Modern *Jalis* can recount up to a dozen generations of their ancestors and use the stories of the past and the moods of the kora to educate and guide their descendants.





2023 Journal of Interdisciplinary Society for Quantitative Research in Music and Medicine

Presenters are encouraged to submit their full conference papers for publication in the 2023 *Journal of Interdisciplinary Society for Quantitative Research in Music and Medicine*. The Journal is peer-reviewed and brings together some of the most intellectually stimulating and interesting research in the field. Please see our submissions guidelines on our website for information on how to submit your paper. ISQRMM also accepts papers that have not been presented at the ISQRMM conference.

Acknowledgments

We would like to thank all the presenters and attendees who always make this conference possible. Your contribution continues to make ISQRMM a vibrant society dedicated to research in music and medicine. Without all of you, this conference would not be possible.

We look forward to seeing you in our next ISQRMM Conference on June 4-5, 2025 at the University of Central Florida, in Orlando, Florida, USA. Please check our website <u>www.isqrmm.org</u> for updates as we plan our next conference. If you would like to be more involved in ISQRMM please let us know. ISQRMM always welcomes members to serve on the Board and to support the mission of ISQRMM.